09/686,594

ABSTRACT OF THE INVENTION

Please replace the ABSTRACT section with the following ABSTRACT section:

~~The present invention provides a denatured albumin lamina, useful for repairing lesions on solid visceral organs. The lamina comprises human serum albumin, formed into a thin, pliant sheet and denatured. The denatured lamina can be sterilized and stored until used. As well, it can be impregnated with a variety of bioagents.~~

~~In another aspect of the present invention, a method is provided for manufacturing the denatured albumin lamina. The method comprises placing a quantity of 50% to 60% (preferably 53% 55%) albumin solution between two nonporous sheets, then spreading the albumin solution between the sheets to a selected and substantially uniform thickness, e.g., 200 μm. The albumin solution sandwich thus formed is placed into a container, which is then evacuated. The sandwich is heated (cured), by autoclaving or immersion in a water bath of at least 86°C (preferably 90°C for five minutes). Denaturation of the entrapped albumin solution changes its state from a viscous liquid to a flexible solid with tensile strength and pliability. Ultimate strength of the flexible solid lamina is directly related to starting albumin solution concentration, curing temperature and curing time.~~

The present invention provides a denatured albumin lamina, useful for repairing lesions on solid visceral organs. The lamina comprises human serum albumin, formed into a thin, pliant sheet and denatured. The denatured lamina can be sterilized and stored until used. As well, it can be impregnated with a variety of bioagents. ~~Another aspect of the present invention is a method comprising welding the albumin lamina to a lesion site on a solid visceral organ.~~ A method for repairing a lesion on a solid visceral organ includes applying an energy-absorbing proteinaceous material to a lesion site on the solid visceral organ lesion; irradiating the proteinaceous material with energy sufficient to fuse the energy-absorbing material at least partially to the lesion site; applying a biocompatible denatured albumin lamina onto the proteinaceous material on the lesion site; and irradiating the biocompatible albumin lamina and the proteinaceous material with energy sufficient to fuse the biocompatible albumin lamina to the proteinaceous material and/or the lesion site. A laser solder can be deployed beneath the lamina to aid in welding it to the organ surface using laser light energy.